

## DETAILED ACTION

### ***Allowable Subject Matter***

1. Claims 2 – 3 are allowed.
2. The following is an examiner's statement of reasons for allowance:
3. As to claim 2, Ellen (U.S. Patent 5,069,008) teaches a method for production of panels (abstract), the method comprising: shaping a zigzag corrugated core (Figure 1, lines 1-6-3 and 2-6-4; column 2, lines 25 – 35); obtaining a crimp profile of the core by sheet bland bending along development zigzag lines and saw-tooth lines marked out on the core (Figure 1; column 2, lines 21 – 23), said zigzag lines and said saw-tooth lines intersecting each other (Figure 2, point 6; column 2, lines 32 – 35). However, Ellen does not teach either connecting the panel with outer panel skins nor does it teach punching a hole in the core panel. Weber (U.S. Patent Number 3,341,395) teaches a method for production of sandwich panels with a corrugated core (column 1, lines 13 - 19), the method comprising: separate shaping of outer panel skins and corrugated core (figure 2, elements 16 and 17; column 2, lines 10 and 15), connecting the core with the outer panel skins (figure 2, elements 16 – 18; column 2, lines 10 – 15 and 37 – 42), and shaping of the core including punching holes on the core, the diameter of the holes being greater than or equal to the maximum sheet bland bending radius (figure 3, element 38; column 2, lines 55 - 58). Note that this can be found because the diameters of holes 38 in figure 3 are illustrated as being much greater than the bend radius of the corrugated core. However, Weber does not teach the steps of marking intersecting

zigzag and saw-tooth bending lines into the core and obtaining a crimp profile of the core by bending the sheet blank along said zigzag and saw-tooth lines.

4. As to claim 3, Ellen (U.S. Patent 5,069,008) teaches a method for production of panels (abstract), the method comprising: marking bending lines on a sheet blank, the bending lines including zigzag and saw-tooth lines (Figure 1, lines 1-6-3 and 2-6-4; column 2, lines 25 – 35); obtaining a crimp profile of the core by bending said sheet blank along said zigzag lines and said saw-tooth lines (Figure 1; column 2, lines 21 – 23), said zigzag lines and said saw-tooth lines intersecting each other (Figure 2, point 6; column 2, lines 32 – 35); and forming a 3-D structure having a height as a function of lengths of said zigzag lines (Figure 1, angle  $\theta_1$ ; column 2, lines 45 – 47). Note that this can be found because Ellen teaches angle  $\theta_1$ , or angle 5-1-6 along the zigzag line, being a set value. Because of this, the longer the zigzag line (i.e. line 1-6) is, the higher the height of the core, or line 6-5, will be. Therefore, Ellen teaches the height of the panel as being a function of the length of the zigzag line. However, Ellen does not teach either connecting the panel with outer panel skins nor does it teach punching a hole in the core panel. Weber (U.S. Patent Number 3,341,395) teaches a method for production of panels (column 1, lines 13 - 19), comprising: separate shaping of outer panel skins and corrugated core (figure 2, elements 16 and 17; column 2, lines 10 and 15), shaping of the core including punching holes on the core, the diameter of the holes being greater than or equal to the maximum sheet blank bending radius (figure 3, element 38; column 2, lines 55 - 58). Note that this can be found because the diameter of holes 38 in figure 3 are illustrated as being much greater than the bend radius of the

corrugated core. Weber further teaches connecting the core with the outer panel skins using an adhesive such that the core is placed between an upper outer panel skin and a lower outer panel skin to form a sandwich panel, the upper outer panel skin and the lower outer panel skin not in contact with each other (figure 2, elements 16 – 18; column 2, lines 10 – 15 and 37 – 42). Note that the use of an adhesive can be found because Weber teaches the outer panel skins being formed from a liquid plastic material, into which the core is placed into during the hardening process, thus adhesively bonding the outer skin panels to the core after hardening (column 2, lines 37 – 42). However, Weber does not teach the steps of marking intersecting zigzag and sawtooth bending lines into the core and obtaining a crimp profile of the core by bending the sheet blank along said zigzag and sawtooth lines.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER BESLER whose telephone number is (571)270-5331. The examiner can normally be reached on 7:30 - 5:00, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bryant David can be reached on (571) 272-4520. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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